UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/692,997	10/20/2000	Kenneth J. Klask	M-6017-1C US	7307

32566 7590 09/30/2005

PATENT LAW GROUP LLP
2635 NORTH FIRST STREET
SUITE 223
SAN JOSE, CA 95134

EXAMINER	
BONSHOCK, DENNIS G	
ART UNIT	**PAPER NUMBER**
2173	

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/692,997	KLASK, KENNETH J.	
	Examiner	Art Unit	
	Dennis G. Bonshock	2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 July 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *22-48* is/are pending in the application.

4a) Of the above claim(s) *45-48* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *22-44* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Non-Final Rejection

Response to Amendment

1. It is hereby acknowledged that the following papers have been received and placed on record in the file: Amendment as received on 7-21-2005.

Claims 22-48 have been examined.

Status of Claims:

2. Claims 22-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dye, patent #5,995,120 and Margulis, patent #6,118,462.

3. Claims 45-48 have been withdrawn by the applicant.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 22-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dye, patent #5,995,120 and Margulis, patent #6,118,462.

6. With regard to claim 22, Dye teaches, a system that uses a GUI controller to provide for more efficient graphics management than a embedded controller alone (see column 2, lines 32-62), a screen that displays current information and allows for user input, the input can change a GUI property of the display, which is reflected on the display (see column 3, line 62 through column 4, line 20 and column 28, lines 19-34),

the IMC generating video signals for driving the display, where the display (for which the user uses to interact with a user) is directly coupled to the IMC (see column 9, lines 59-67 and in figure 3C), the I/O (used to interact with the user) being coupled directly to the bus that the IMC is on (see column 10, lines 7-30 and in figures 2 and 3C), a system of using multiple buffers to provide the information for displaying the GUI on the screen and for buffering information that corresponds to a new interface (a change) (see column 21, lines 26-58), the use of opcode for attributes of objects or windows, whether it be for maintain a screen display or to effect a change to a different screen (see column 32, lines 33-55 and column 28, lines 13-25), a GUI library (see column 21, lines 27-36), sets of executable code (executable by the CPU) for rendering the display (see column 3, line 61 through column 4, line 7), graphics data stored in a frame buffer (see column 10, lines 59-61), a processor for handling inputs and rendering a GUI (see column 3, line 61 through column 4, line7), the processor connected to an input device and a digital to analog converter (see column 3, lines 27-43 and column 1, lines 37-37), the processor connected to memory via a memory bus (see column 2, lines 62-66), a CPU for executing codes for the objects and a frame buffer for rendering objects to the interface (see column 32, lines 33-55, column 11, lines 21-35, and column 10, lines 59-61), and a pixel serialized coupled to the display for refreshing, and object rendering (see column 30, lines 34-55), and further teaches a graphics controller comprised in an integrated memory controller (IMC) which includes graphic processing capabilities to relieve workload from the main CPU (see column 3, lines 5-20, in column 2, lines 50-67 and column 1, lines 46-61). Dye teaches a graphics controller that is embedded in a

memory controller, but doesn't specifically teach distinct system and graphics controllers each having their own controller specific memory. Margulis teaches a system using a graphics controller, similar to that of Dye, but further teaches, in column 2, line 62 through column 3, line 30 and in figure 2, a system with distinct system and graphics controllers each having their own controller specific memory. It would have been obvious to one of ordinary skill in the art, having the teachings of Dye and Margulis before him at the time the invention was made to modify the controller system of Dye, to separate the two controllers. One would have been motivated to make such a combination because Dye teaches two similar controllers, but combines them to minimize memory transfers, similar to that of Margulis.

7. With regard to claim 23, Dye teaches, a system that uses a GUI controller to provide for more efficient graphics management than a embedded controller alone (see column 2, lines 32-62), a system of using multiple buffers to provide the information for displaying the GUI on the screen and for buffering information that corresponds to a new interface (a change) (see column 21, lines 26-58), the use of opcode for attributes of objects or windows, whether it be for maintain a screen display or to effect a change to a different screen (see column 32, lines 33-55 and column 28, lines 13-25), a GUI library (see column 21, lines 27-36), sets of executable code (executable by the CPU) for rendering the display (see column 3, line 61 through column 4, line 7), graphics data stored in a frame buffer (see column 10, lines 59-61), a processor for handling inputs and rendering a GUI (see column 3, line 61 through column 4, line7), the processor connected to an input device and a digital to analog converter (see column 3, lines 27-

43 and column 1, lines 37-37), the processor connected to memory via a memory bus (see column 2, lines 62-66), a CPU for executing codes for the objects and a frame buffer for rendering objects to the interface (see column 32, lines 33-55, column 11, lines 21-35, and column 10, lines 59-61), and a pixel serialized coupled to the display for refreshing, and object rendering (see column 30, lines 34-55), and further teaches a graphics controller comprised in an integrated memory controller (IMC) which includes graphic processing capabilities to relieve workload from the main CPU (see column 3, lines 5-20, in column 2, lines 50-67 and column 1, lines 46-61). Dye teaches a graphics controller that is embedded in a memory controller, but doesn't specifically teach distinct system and graphics controllers each having their own controller specific memory. Margulis teaches a system using a graphics controller, similar to that of Dye, but further teaches, in column 2, line 62 through column 3, line 30 and in figure 2, a system with distinct system and graphics controllers each having their own controller specific memory, and in column 1, lines 48-53, the output device being a flat panel monitor. It would have been obvious to one of ordinary skill in the art, having the teachings of Dye and Margulis before him at the time the invention was made to modify the controller system of Dye, to separate the two controllers. One would have been motivated to make such a combination because Dye teaches two similar controllers, but combines them to minimize memory transfers, similar to that of Margulis.

8. With regard to claim 24, which teaches an output device coupled to the frame buffer to receive the GUI, the output device displaying the GUI to the user, column 3,

lines 36-44 and column 10, lines 59-61, a frame buffer coupled to the Display for providing a GUI to the display.

9. With regard to claims 25 and 36, which teach the output device being an LCD, Margulis teaches, in column 1, lines 48-53, the output device being a flat panel monitor.

10. With regard to claim 26, which teaches a pixel serializer coupled between a frame buffer and the LCD, for outputting each line of the GUI in the buffer to the LCD, Dye teaches, in column 30, lines 34-55, a pixel serialized coupled to the display for refreshing and object rendering, the objects having been stored in a frame buffer (see column 10, lines 59-61).

11. With regard to claims 27 and 37, which teach the source external t the first controller being an input device, the parameter being a command from the user to the second controller for controlling the device, and the processor communicating the parameter with the source by receiving the command from the input device, Dye teaches, in column 28, lines 13-25, the system being usable to accept commands input by a user through an input device, were processing will take place in the IMC.

12. With regard to claims 28 and 38, which teach executable code comprising instructions for the processor to send the command to the second controller, the method further comprising the processor sending the command to the second controller, Margulis teaches, in column 2, line 62 through column 3, line 30 and in figure 2, the processor sending commands to a second controller.

13. With regard to claims 29 and 39, which teach the input device being one of a touch screen, a key pad, an infrared remote, and a voice decoder, Dye teaches, in column 1, lines 32-37, I/O coming form various I/O devices, including a keyboard, etc.

14. With regard to claims 30 and 40, which teach the GUI object being one of a button and a list, Dye teaches, in column 28, lines 13-25, the user interface having clickable GUI objects.

15. With regard to claims 31 and 41, which teach the source external to the first controller being a second controller and the parameters being a status of the device from the second controller to the user, and the processor communicating the parameter with the source by receiving the status from the second controller, Dye teaches, in column 27, lines 15-25, refreshing of the display responsive to user requests, in the system with two distinct controllers taught by Margulis.

16. With regard to claims 32 and 42, which teach the GUI object being a text field, Dye teaches, in column 5, lines 40-46, the GUI object being a text field.

17. With regard to claims 33 and 43, which teach an second memory coupled to the processor the second memory storing the document, the processor buffering the document form the another memory to the at least one memory, Margulis teaches, in column 2, line 62 through column 3, line 30 and in figure 2, a system in which each controller has its own associated memory where items need be passed between memories for processing/displaying. Items are passed from the graphics controller memory to the system controller memory for processing, and passed from the system controller memory to the graphics controller memory for display.

18. With regard to claims 34 and 44, which teach the second controller further comprising another memory storing the document, the second controller reading the document form the another memory and sending the document to the first controller, the first controller storing the document in the at least one memory, Margulis teaches, in column 2, line 62 through column 3, line 30 and in figure 2, a system in which each controller has its own associated memory where items need be passed between memories for processing/displaying. Items are passed from the graphics controller memory to the system controller memory for processing, and passed from the system controller memory to the graphics controller memory for display.

19. With regard to claim 35, which teaches a system that uses a GUI controller to provide for more efficient graphics management than a embedded controller alone (see column 2, lines 32-62), a screen that displays current information and allows for user input, the input can change a GUI property of the display, which is reflected on the display (see column 3, line 62 through column 4, line 20 and column 28, lines 19-34), a system of using multiple buffers to provide the information for displaying the GUI on the screen and for buffering information that corresponds to a new interface (a change) (see column 21, lines 26-58), the use of opcode for attributes of objects or windows, whether it be for maintain a screen display or to effect a change to a different screen (see column 32, lines 33-55 and column 28, lines 13-25), a GUI library (see column 21, lines 27-36), sets of executable code (executable by the CPU) for rendering the display (see column 3, line 61 through column 4, line 7), graphics data stored in a frame buffer (see column 10, lines 59-61), a processor for handling inputs and rendering a GUI (see

column 3, line 61 through column 4, line7), a CPU for executing codes for the objects and a frame buffer for rendering objects to the interface (see column 32, lines 33-55, column 11, lines 21-35, and column 10, lines 59-61), and further teaches a graphics controller comprised in an integrated memory controller (IMC) which includes graphic processing capabilities to relieve workload from the main CPU (see column 3, lines 5-20, in column 2, lines 50-67 and column 1, lines 46-61). Dye teaches a graphics controller that is embedded in a memory controller, but doesn't specifically teach distinct system and graphics controllers each having their own controller specific memory. Margulis teaches a system using a graphics controller, similar to that of Dye, but further teaches, in column 2, line 62 through column 3, line 30 and in figure 2, a system with distinct system and graphics controllers each having their own controller specific memory. It would have been obvious to one of ordinary skill in the art, having the teachings of Dye and Margulis before him at the time the invention was made to modify the controller system of Dye, to separate the two controllers. One would have been motivated to make such a combination because Dye teaches two similar controllers, but combines them to minimize memory transfers, similar to that of Margulis.

Response to Arguments

20. The arguments filed on 7-21-2005 have been fully considered but they are not persuasive. Reasons set forth below.

21. The applicants' argue that Dye does not disclose a "GUI controller with a GUI processor that operates a GUI of a device independently from an embedded controller of the device."

22. In response, the examiner respectfully submits that Dye teaches, in column 3, lines 5-20, in column 2, lines 50-67 and column 1, lines 46-61, a graphics controller comprised in an integrated memory controller (IMC) which includes graphic processing capabilities to relieve workload from the main CPU. This shows the same level of independence as is presented in the claimed invention. This can be shown by the claimed invention teaching a reliance on the embedded processor for supplying the status and the use of this status information for rendering.

23. The applicants' argue that "the IMC does not operate independently form the CPU to draw the window/object and to interact the user."

24. In response, the examiner respectfully submits that Dye teaches, in column 3, lines 5-20, in column 2, lines 50-67 and column 1, lines 46-61, a graphics controller comprised in an integrated memory controller (IMC) which includes graphic processing capabilities, to relieve workload from the main CPU, and further provides video outputs. This shows the same level of independence as is presented in the claimed invention. This can be shown by the claimed invention teaching a reliance on the embedded processor for supplying the status and the use of this status information for rendering. The IMC is further shown to be coupled to the I/O controller (see column 10, lines 7-30 and figure 2).

25. The applicants' argue that "the IMC does not operate a GUI independently form the CPU as recited in claim 1"

26. In response, the examiner respectfully submits that claim 1 is currently cancelled but to attempt to address the applicants argument claim 22 will be referred to. Claim 22 states that "...the GUI processor executes the first set of executable cods to render the first GUI object to the frame buffer independently form the embedded processor, to communicate with the embedded processor to receive the status from the embedded processor, and to further render the first GUI object to the frame buffer in response to the status independently form the embedded processor; ..." This shows a reliance on the embedded processor for supplying the status and the use of this status information for rendering. The IMC of Dye shows the same level of independence.

27. The applicants' argue that Dye does not disclose a "GUI object library" that stores codes defining the appearance and functionality of GUI objects.

28. In response, the examiner respectfully submits that Dye teaches, in column 21, lines 27-36, the system accessing supplemental libraries that contain application data such as 2-D and 3-D constraints, number of bits per pixel, and area, which a window works. The libraries are still believed to provide code that helps in the rendering of the objects appearances and functions by defining attributes, whether this is to further define or to do the initial definition.

Conclusion

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis G. Bonshock whose telephone number is (571) 272-4047. The examiner can normally be reached on Monday - Friday, 6:30 a.m. - 4:00 p.m.

30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached on (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

9-28-05
dgb

RAYMOND J. BAYERL
PRIMARY EXAMINER
ART UNIT 2173